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AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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Blight in the Pear Tree—its cause and Effect.

The following Essay upon this subject is from the pen of the Rev. *H. W. Beecher*, a gentleman of great intelligence, who has given to those sciences connected with Agriculture and Horticulture much time and close observation, and therefore his opinions and views are entitled to great respect. This paper was read before the Indiana Horticultural Society, and we copy it from the Western Cultivator. It is marked by great research and correct thinking, and we have do doubt but that it will be read with profound interest, and particularly so, as the last year has been one in which the disease treated of, has committed dreadful ravages among fruit trees.

The Blight.

The year 1844 will long be remembered for the extensive ravages of that disease hitherto denominated *fire-blight*. Beginning at the Atlantic coast, we have heard of it in Pennsylvania, Maryland, Virginia, Ohio, Kentucky, Indiana, and as far as Tennessee; and it is probable that it has been felt in every fruit-growing State in the Union, where the season of 1843 was the same as that west of the Alleghany range, namely, cold in spring, dry throughout the summer, and a wet and warm fall, with early and sudden winter.

In Indiana and Ohio the *Blight* has prevailed to such an extent as to spread dismay among cultivators; destroying entire collections; taking half the trees in large orchards; affecting both young and old trees, whether grafted or seedlings, in soils of every kind. Many have seen the labor and fond hope of years cut off, in one season, by an invisible destroyer, against which none could guard; because, in the conflicting opinions, none were certain whether the disease was atmospheric, insect, or chemical.

I shall now proceed to describe that blight known in the western States, (without pretending to inentify it with the blight known in New York and New England,) to examine the theories proposed for its causation, and to present what now seems to me the true cause.

I. *Description.*—Although the signs of it, as will appear in the sequel, may be detected long before the leaves put out in the spring, yet its full effects do not begin to appear until May, or if the spring be backward, until June. On the wood of the last year will be found a point where the bark is either dead and dry, or else at the same point the bark will be puffed, softened, or sappy with thickened sap—these two appearances indicating only different degrees of the same blight. Wherever the bark is dead and dry, the limb will flourish above it, make new wood, ripen its fruit, but perish the ensuing winter. In the other case as soon as the circulation of the sap becomes active, the point described shows signs of disease, the leaf turns to a darker brown than is natural to its ordinary decay, being nearly black, and the wood perishes.

The disease, at first, blights the terminal portions of the branch; but the affection spreads gradually downwards, and sometimes affects the whole trunk. The time from the first appearance of the blight to that in which any affected part dies, is various; sometimes two or three weeks; sometimes a day only; and sometimes, but rarely, even a few hours consummate the disaster.

On dissecting the branch, the wood is of a dirty, brownish, yellow color; the sap thick and unctuous, of a sour, disagreeable odor, like that of a fermented watermelon, or the tops of potato vines after they have been frosted. In still, moist days, where the blight is extensive in an orchare, this odor fills the air, and is disagreeably perceptible at some distance from the trees.

Sometimes the bark bursts, the sap exudes, and runs down, turning black; and its acridity will destroy vegetation, on which it may drop; and shoots, at a distance from the trunk upon which the rain washes this ichor, will soon perish. When we come to treat of the *cause* of this disease, it will be important to remember this malignancy of the fluids.

We are carefully to distinguish these appearances, peculiar to what I suppose ought to be called *winter-blight*, from another and a *summer-blight*. In this last, the leaf is affected at first in spots; gradually the whole leaf turns russet color and drops. Along the wood may be seen the hardened trail as of a slimy insect, of an ash color. The *wood* suffers very little by this summer-blight, and sometimes none. The winter blight is found on almost all kinds of trees. This summer, it has affected the apple, the pear, the peach, the quince, the English hawthorn, privet, black birch, Spanish chesnut elder, and calycanthus. I enumerate the most of these kinds on the authority of J. H. James, of Urbana, Ohio, and C. W. Elliott, of Cincinnati: having observed it myself only on fruit trees.

II. *Theories.*—A variety of theories exist as to the causes of this disease. Some are mere imaginations; some are only ingenious; and some so near to what I suppose to be the truth, that it is hardly possible to imagine how the discovery was not made.

The injury is done in the fall, but is not seen till spring, or summer, or even the next fall. Thus, six months or a year intervene between the *cause* and the *effect*—a sufficient reason for the difficulty of detecting the origin of the evil.

1. Some have alleged that the rays of the sun, passing through vapors which arise about the trees, concentrate upon the branches, and destroy them by the literal energy of fire. Were this true, the young and tender shoots would suffer first and most; all pear trees would suffer alike; all moist and hot summers would be affected with blight; herbaceous plants would suffer more than ligneous:—all of which results are contrary to facts.

2. Some have supposed the soil to contain deleterious substances, or to be wanting in properties necessary to health. But in either case such a cause of the blight appears untrue, when we consider that trees suffer in all soils, rich or poor; that in the same soil, one tree is blighted, and the next tree escapes; that they will flourish for twenty years, and then blight; that a tree partially diseased recovers, and thrives for ten or more years without recurrence of blight.

3. It has been attributed to volent and sudden changes of temperature in the air and of moisture in the earth; to sudden change from sward to high tillage; and the result is stated to be an "overplus" of sap, or a "surfeit." All these causes occur every year; but the blight does not every year follow them. Changes of temperature, and violent changes in the condition of the soil may be *allied* with the true cause. But when *only* these things exist, no blight follows.

4. Others have attributed the disease to over stimulation by high manuring, or constant tillage; and it has been said that covering the roots with stones and rubbish, or laying the orchard down to grass, would prevent the evil. Facts warrant no such conclusions. Pear trees in Gibson county, Indiana, on a clay soil, with blue slaty subsoil, were affected this year more severely than any of which we have heard. Pear in southern parts of this State, on red clay, where the ground had long been neglected, suffered as much as along the rich bottom lands of the Wabash about Vincennes. If there was any difference, it was in favor of the richest and. About Mooresville, Morgan co., Ia., pears have ben generally affected, and those in grass lands *as much* as those in open soils. Aside from these facts, it is well known that pear trees do not blight in those seasons when they make the rankest growth, more than in others. They will thrive rampantly for years, no evil arising from their luxuriance, and then suddenly die of blight.

5. It has been supposed by a few to be the effect of *age*,—the disease beginning on old varieties, and propagated upon new varieties by contagion. Were this the true cause, we should expect it to be most frequently developed in those pear regions where old varieties most abound. But this disease seems to be so little known in England, that Loudon, in his elaborate Encyclopedia of Horticulture, does not even *mention* it. Mr. Manning's statement will be given, farther on, to the same purport.

6. *Insect theory.*—The confidence with which eastern cultivators pronounce the cause to be an *insect*, has in part served to cover up singular discrepancies in the separate statements in respect to the ravages, and even the species of this destroyer. The Genesee Farmer of July, 1843, says, "the cause of the desease was for many years, a matter of dispute, and is so still by some persons; but the majority are now fully convinced that it is the work of an insect" (*scolytus pyri.*) T. W. Harris, in his work on Insects, speaks of the minuteness and obscure habits of this insect, as "reasons why it has eluded the researches of those persons who disbelieve in its existence as the cause of the blasting of the limbs of the *pear tree.*" Mr. Harris evidently supposed, until so late as 1843, that this insect infested only the *pear tree*; for he says, "the discovery of the blight-beetle in the limbs of the apple tree is a new fact in natural history; but it is easily accounted for, because this tree belongs not only to the same natural group, but also to the same genus as the pear tree. It is not, therefore, surprising, that both the pear and the apple tree should occasionally be attacked by the same insect."

This insect is said to eat through the *alburnum*, the hard wood, and even a part of the pith, and to destroy the branch by separation of part from part, as a saw would. On these facts, which there is no room to question, we make two remarks.

1st, That the blight thus produced is *limited*, and probably sectional or local. No account has met my eye which leads me to suppose that any considerable injury has been done by it. Mr. Manning, of Salem, Mass., in the second edition of his Book of Fruits, stated that he has never "*had any trees affected by it*"—the blight. Yet his garden and nursery has existed for twenty years, and contained immense numbers of trees.

2nd, It is very plain that neithar Mr. Lowell, originally, nor Dr. Harris, nor any who describe the blight, as caused by the blight-beetle, had any notion of that disease which passes by the same name in the middle and western States. The blight of the *Scolytus pyri* is a mere *girdling* of branches—a mechanical separation of parts: and no mention is made of the most striking facts incident to the great blight—the viscid unctuous sap; the bursting of the bark, through which it issues; and its poisonous effects on the young shoots upon which it drops.

I do not doubt the insect-blight; but I am sure that it is not *our* blight. I feel very confident, also, that this blight, which from its devastations, may be called the great blight, has been felt in New England, in connection with the insect-blight, and confounded with it, and the effects of two different causes, happening to appear in conjunction, have been attributed to one, and the least influential, cause. The writer in Fessenden's American Gardener, (Mr. Lowell?) says of the blight, "it is sometimes so rapid in its progress, that in a few hours from its first appearance, the whole tree will appear to be mortally diseased." This is not insect-blight; for did the blight-beetle eat so *suddenly* around the whole *trunk?* Now, hear is a striking appearance of the great blight, confoun-

ded with the minor blight, as I think will appear in the sequel.

The theory has stood in the way of a discovery of the true cause of the great blight; for every cultivator has gone in search of insects; they have been found in great plenty, and in great variety of species, and their harmless presence accused with all the mischief of the season. A writer in the Farmer's Advocate, Jamestown, N. C., discerned the fire-blight, and traced it to "small, *red*, pellucid insects, briskly moving from place to place on the branches." This is not the *Scolytus pyri* of Prof. Peck and Dr. Harris.

Dr. Mosher, of Cincinnati, in a letter published in the Farmer and Gardener for June 1844, describes a third insect—"*very minute brown-colored aphides*, snugly secreted in the axilla of every leaf on several small branches; * * * * most of them were busily engaged with their proboscis inserted through the tender cuticle of this part of the *petiole* of the leaf, feasting upon the *vital juices* of the tree. The leaves being thus deprived of the necessary sap for nourishment and elaboration, soon perished, * * * * while all that part of the branch and trunk below, dependent upon the elaborated sap of the deadened leaves above, shrunk, turned back, and dried up."—p. 261.

Lindley, in his work on Horticulture, p. 42—46, has detailed experiments illustrating vegetable *perspiration*, from which we may form an idea of the amount of fluid which these "very minute brown colored aphides" would have to drink. A sunflower three and half feet high, perspired in a very warm day thirty ounces—nearly two pounds: on another day, twenty ounces. Taking the old rule, "a pint a pound," nearly a quart of fluid was *exhaled* by a sunflower in twelve hours; and the vessels were still inflated with a fresh supply drawn from the roots. Admitting that the limbs of a fruit tree have a less current of sap than a sunflower or grape vine, yet in the months of May and June the amount of sap to be exhausted by these very minute brown aphides would be so great that if they drank it so suddenly as to cause a tree to die in a day, they would surely augment in bulk enough to be discovered without a lens. If some one had accounted for the low water in the Mississippi in the summer of 1843, by saying that buffaloes had drank up all the upper Missouri, and cut off the supply, we should be at a loss which most to pity, the faith of the narrator, or the probable condition of the buffaloes after their feat of imbibition.

But the most curious results *follow* these feats of suction. The limbs and trunk *below*, shrink and turn black, for want of that elaborated sap extracted by the aphides. And yet every year we perform artificially this very operation in *ringing* or *decortication* of branches, for the purpose of accelerating maturation, or inproving the fruit. Every year the *saw* takes off a third, a half, and sometimes more of a living tree; and the effect is to produce new shoots, not death. Is an operation which can be safely performed by man, *deadly* when performed by an insect? Dr. Mosher did not detect the insects without extreme search, and then only in colonies, on healthy branches.—Do whole trees wither in a day by the mere suction of such insects? Had they been supposed to *poison* the fluids, the theory would be less exceptionable, since poisons in minute quantities may be very malignant.

While we admit a limited mischief of insects, they can never be the cause of the prevalent blight of the middle and western States—such blight as prevailed in and around Cincinnati in the summer of 1844—nor of that blight which prevailed in 1832. The *blight-beetle*, after most careful search and dissection, has not been found, nor any trace or passage of it. Dr. Mosher's insect may be set aside without farther remarks.

I think that farther observation will confirm the following conclusions:

1. Insects are frequently found feeding in various ways upon blighted trees, or on trees which afterwards become so.

2. Trees are fatally blighted on which no insects are discerned feeding—neither aphides nor *scolytus pyri*.

3. Multitudes of trees have such insects on them as are in other cases supposed to cause the blight without a sign of blight following. This has been the case in my own garden.

To be Continued.

Cultivation of Grass.—"Among the improvements of a few years past, there are none that promise more than those in the cultivation of grass. The peculiarity of this culture, first brought to the notice of the public by Mr. Phinney, is, that the land is continued in grass, year after year, without the intervention of any other crop, except occasionally Indian corn. Thus far it has succeeded well. It is done by turning the furrows flat, rolling them smooth, harrowing or cross-plowing, or both, without disturbing the sod, applying compost manures and the seed upon the surface and harrowing it in. This process is repeated as often as the land demands a coating of manure. The land is kept in a light and favorable condition for supporting the crops, by the decaying vegetable matter that was upon the surface.

Another modification in the cultivation of grass, which has been successfully practiced by Mr. D. Putnam, of Danvers, and others, is by sowing the seed among the corn at the last hoeing*—taking care to have the ground left in a level and smooth condition. Repeated experiments have shown that the old practice of raising a hill about the corn is not attended with any benefit. If then, the smooth culture of the corn will aid in bringing the lands into good condition for grass, which is the primary object in view—our crops of barley, oats and rye being raised merely as secondary objects of attention—does it not behoove our farmers to inquire whether their grass seed cannot be advantageously sown in the summer or autumn, without any intermediate crop of grain?"

[*One of the best set fields of timothy we have ever seen is a ten acre lot on the Canton property. The seed was sown among the corn at the last hoeing. The corn had been tended with the *Cultivator* throughout the season, with the view of keeping the surface flat and smooth, and the seed, after being sown, was *lightly* harrowed in; the seed took well, and the plants being protected by the corn, grew off finely and covered the entire ground some 6 or 8 inches in height by frost. When the corn was gathered, the stalks were cut close *into* the earth, so that no impediment presented itself the ensuing season, to the cutting of the grass. The ground was highly manured with *street dirt* and *ashes* for the corn crop, broadcast, and was in the best possible condition to receive the timothy seed and nurture the plants.—*Ed. Amer. Farmer.*]

Interesting Experiments in Planting Corn.

To the Editors of the Louisiville Journal:

Prospect Hill, Dec. 7, 1844.

Gentlemen: I beg leave to offer to your consideration the result of an experiment made during the present year, to ascertain the advantages of planting corn more closely than has generally been practiced; and the number of stalks which should be left in each hill at the different distances at which it is planted. The experiment was made on ground which had been cleared in 1810. In its natural state it was as rich as the best Kentucky lands, and its fertility had been preserved by a due proportion of grass crops, but it had no manure. In the spring of the year 1841 the field was sowed with red clover, among growing wheat. In 1842 and 1843 the clover was pastured, by a well constructed plough. Early in April, of the present year, the ground was again ploughed, harrowed, and laid off and planted on the 12 of that month. On one side of the field, intended for hemp, I caused four acres to be laid off, in an oblong square, as follows: First, the long way exactly three and a half feet; and then at right angles, one acre four feet; one acre three and a half one acre three feet; and one acre two and a half feet. In due time I thinned the three first acres to three stalks in a hill, and the fourth to two stalks in a hill. Supposing the hills each to have the number intended, the number of stalks on each acre would have been as follows:

	Stalks.
1 acre 3½ by 4 feet,	9,335
2 acre 3½ by 3½ feet,	10,668
3 acre 3½ by 3 feet,	12,447
4 acre 3½ by 2½ feet,	9,956

The season up to the 2d of July was tolerably favorable, though there was too much rain for a first rate crop of corn. For two weeks succeeding no rain fell. During this period the atmosphere was dry and windy. As the corn was generally getting into silk when this drought commenced, and as this is the period when corn requires much rain to make it *ear well*, it suffered very much. Although light rains again fell from the middle of July to the last of that month they came too late to be materially beneficial to early planted corn. The consequence was that scarcely a stalk produced more than one ear, and even that one of diminished size. I am fully persuaded that the dry weather, in the first half of July, diminished the crop at least fifty per cent. The crop was also somewhat diminished by great numbers of crows opening and picking off the grains at the small end of the ear, when in the milk state. The corn was gathered, and each acre separately measured, about the first of November, when perfectly dry, and the quantity produced was as follows: The first acre 68 bushels, second acre, 69 bushels, third acre 69 bushels, and fourth acre 77½ bushels. The ground throughout lays equally well, and was of the same quality, but the first acre was rather the most injured by the crows.

It will be seen that the acre, planted three and a half by four feet, produced nearly as well (perhaps quite, making a due allowance for the greater injury received) as the two next acres. That the acre having 12,447 stalks produced only the same number of bushels as that having 10,668. And that the acre having two stalks to the hill, and 9,956 in the whole, produced eight and a half bushels more than either of the others.

From this experiment it would seem that, in ground of the *best quality*, where *three stalks* are intended to be left in a hill, the distance each way should not be less than three and a half feet; and that, where it is intended to plant more closely, not more than *two stalks* should be left in a hill. The acre planted three and a half by two and a half feet produced decidedly the best, but it was too close one way to be ploughed conveniently. Thus planted there were eight and three quarters square feet to each hill. If planted three feet each way there would be nine square feet to each hill. This, I am of opinion, would be the better way to plant, where it is intended to leave two stalks in a hill, as the distance each way would be more convenient for ploughing, and the number of stalks per acre would be but slightly diminished.

As our corn crops are affected by so many contigencies, a single experiment is not very conclusive in favor of any particular theory, I intend, if I am spared, to repeat my experiment next year on the same ground, except that I will lay on the ground the long way three feet, and in the other direction four, three and a half, and three feet, thinning the two first to three stalks, and the third to two stalks in a hill.

On the day after planting the above experimental crop, I planted some twelve or fifteen acres of corn on ground which had been cleared and cultivated some twenty or twenty-five years before it came into possession of the plantation on which I now reside—1812. This land had been considerably reduced by a strong succession of corn crops, but as it lay well I found no difficulty in renovating it by grassing and manuring. For the three or four years preceding the present it was cultivated in hemp. Early in April it was ploughed and harrowed, which left it in a finely pulverized state. It was laid off by a small plough exactly three and a half feet each way, planted on the 13th of April, and in due time thinned out to three stalks in the hill. It was cultivated by ploughing both ways with the common shovel plough and once hoed, so as to leave the hills perfectly clean. This corn was affected by the drought in June in the same manner as related, in relation to the four acres described above.

I caused one acre to be pulled and measured when perfectly dry, through the central part of the field, where it had not been injured by crows or squirrels, and the yield was seventy-seven bushels. In both cases, I planted the same kind of corn, a medium between the white flint and gourd seed. This corn is not so productive as the larger kinds, but better for bread.

I have mentioned the product of the last mentioned acre, not because of its extraordinary character—for it falls greatly short of the great crops of Bryant and Young of Jessamine county—but to show that land cleared nearly sixty years, which had been reduced by twenty or twenty-five successive crops of corn, can be easily renovated so as to produce seventy-seven bushels per acre, in quite an unfavorable season. I will only add that although I did not measure the balance of the field, I am satisfied from the number of wagon loads, that the whole would average fully seventy-seven bushels per acre.

Yours, truly, A. Beatty.

Tillage and Pasturage are the two breasts of the State. —*Sully.*

The following article is from the Washington Co. (N. Y.) Post:

THE POTATO INSECTS OR WORM.

These insects, which are novel visitors in our vicinity, are committing extensive ravages on the potato crop. They vary in size and structure. In August, my attention was first called to the sickly and decaying appearance of the potatoe tops in many of the fields. Intelligent farmers assigned the dryness of the season as a reason for the premature decay of the plant. I conversed with several business men from Western New York, where the potato disease had prevailed for two preceding seasons, but we received nothing satisfactory on the subject. I examined the Cultivator, and other publications, which furnished no solution to the mystery.

About the first of September, I opened a few hills of pink-eye potatoes having decayed tops, when hundreds of small, white insects were seen on the potatoes. Some of the potatoes were entirely rotten. I, however, resolved to give the subject a more thorough investigation. Having washed a few of them perfectly clean, I examined and readily discovered that there were first minute punctures through the skin into the substance of the potato—the healthy appearance of the skin for a short distance around the perforations, was changed to a brown color: second, a vescication or blister; third, a vegetable abscess of limited extent, filled with purulent matter—evidently showing that the potato is very much infested by the insects, and were going to decay in consequence of the ravages of these borers—fourth, the appearance of moist gangrene, of a livid or purple color, which is only a variety of decomposition resulting from the injury inflicted by those insects.

A Buffalo paper stated that they had considerable complaint from the farmers in that vicinity, that the potato crop was beginning to rot; the tops were stricken with the rust and dying before the plant had come to maturity. This statement corresponded precisely with the appearance of the plant in our town.

A late number of the Journal of the Royal Agricultural Society of England, has a paper written by a Russian, on dry gangrene, or a disease which may be designated by some other name, which has affected the potato crop for several years in Great Britan, Germany, Russia, and Sweden—and here I would ask, was the potato rot, or potato worm, heard of in America *before the importation of foreign potatoes?*—as every one knows the origin of the Hessian fly.

The public mind begins to be excited on this subject, and the question is often asked, what is the cause of the potato rot?

The perforations in the skin appear to be made by different kinds of worms. The most numerous are above half an inch in length, of a brown color, body oval, when full size. The other is a small brown worm, body round, and of the size of pinwire; on the potatoes are small white spots resembling potato starch, which I at first mistook for mould, but proved to be the castings of these destructive borers. A short time since, I called at the residence of A. Livingston, Esq., Greenwich, who spoke of the potato rot, and expressed his fears that he should lose at least one-third of his crop, perhaps one-half, but had not learned the cause of the disease. We went out into his garden and examined, when he became convinced by demonstration that it was these little miners which were working the destruction of his crop.

As potatoes were past the flowering season when I commenced my observations, I had no opportunity to trace the history of these insects any farther, and consequently their larvæ are unknown to me. A good description of the larvæ, their seasons, habits, transformations, &c., is wanted. It is probably the curculio, a genus of insects belonging to the coleoptera or beetle order. Judging from a few experiments which I have made by sifting airslacked lime on the sound and punctured potatoes, I believe that it will destroy many of the insects and have a salutary effect on the potatoes.

ARCH'D MCALLISTER.

Salem, N. Y., Sept. 20, 1844.

☞We copy the various and conflicting views of writers on the cause of the potato disease, because no one as yet has demonstrated with any thing like certainty, *what* that cause is; but we are not ready to believe with the writer above that the worms he describes are the producers of the evil: so far from being the *cause* of the mischief, they may be merely an *effect—particeps criminis,* (as the lawyers say,) they *may* be, but not the *principals* in the guilt. The writer supposes the insect he describes may be the *curculio.* Perhaps, then, we can account for that depredator ceasing his ravages on our plum trees. His taste may have changed, and the potato become more palatable to him than the plum! This, if the fact, is marvellously strange, and may well excite despondency in the potato-growers, since the curculio is among the boldest and most persevering of insectivorous mischief-workers. What think our learned entomologists of this alarming theory?

Should the rot appear next season, it is not improbable that observation may lead to the discovery of the true cause—though, we are aware, its detection has not resulted from several years' observation by skilful cultivators and scientific men in Great Britain. The most probable theory we have seen advanced, is that of Mr. Teschemacher; and it would not surprise us if his intelligently conducted experiments resulted in proving the rot to be caused by a species of fungus.—*N. E. Farmer.*

RAISING POTATOES.

The editor of the Farmer's Monthly Visitor has this season raised between twelve and thirteen hundred bushels of potatoes on about six acres of sward land. The ground was prepared in the following manner:—After the corn planting had been finished, about the 25th of May, manure, on about one acre compost, and upon the other five acres clear manure from a stable, made during the preceding summer and winter, was laid out in piles and spread over the grass which had then already started green from the ground. In furrows of about 12 inches in width, the whole flat was completely turned over, these shutting into each other so close as to leave no vacuum between. With the sod thus inverted and the manure all covered to the depth of about six inches, the potatoes were planted between every third furrow, at the distance in the rows of about three feet from each other. A hole or crevice was made from two to three inches below the surface, with a sharpened stick, and at the distance of eighteen inches a single potatoe of the common size placed in it and covered up with a kick of the heel, generally, where the soil would admit of it. Care was taken that the seed potatoe should not enter so deep as to go below the upturned sward. In this way the potatoes grew above the sod, while the roots drew sufficient sustenance from the decomposed manure and decaying turf at the bottom. During the whole season there was no difficulty from weeds: the witchgrass in some parts of the field where it had taken root, did, indeed, late in the summer, spring through the inverted turf. The whole process of hoeing the six acres twice, cost only twenty-two days' work of one man; the planting was done with great expedition. In twice hoeing and going over with the cultivator and the subsequent digging of the potatoes, neither the bottom turf nor the manure overlaid by it has as yet been disturbed. The crop of Indian corn intended for the same land next year, according to our present year's experience of a field last year cultivated in the same way, will derive a greater advantage from the manure than the potatoe crop of the present year.

One advantage of raising potatoes in this manner, we believe to have been the entire freedom of the crop from the disease and rot which have been so generally complained of. The ground was the ordinary intervale of Merrimack river, which had laid so long to grass, as to give not much over half a ton of hay to the acre—it was good land, but was much in want of stimulating manure. The crop of potatoes was probably not quite as large as it might have been, if the same manure had been mixed in the same depth of soil actually pulverized; neither was the labour of making the crop more than half as much; but the manure is left in the ground to do much the most effective service hereafter. On a diligent inquiry of our potatoe diggers, we have not been able to learn that any of the new potatoes were infected with the rot. The earliest kind were taken from the field before the warm weather of September, and those laid in the common cellar, have as yet discovered none of those offensive qualities which have been so much a matter of complaint. One hundred and fifty barrels of the first dug were sent and sold in the Boston market, averaging, after paying the price of transport, twenty-five cents the bushel. Of the long reds, we have between five and six hundred bushels in the ground under a hemlock cover, which in the market next spring, may be worth fifty cents the bushel: at half that price, after paying all expenses of cultivation and manure, this crop will give us a clear gain of about twenty dollars to the acre.

On about one acre of the potatoe ground manured with the stable dung, after the first hoeing, was placed some eight hundred pounds of ground plaster. Where this was applied the tops of the potatoe were more luxuriant—the potatoes seemed to be fewer in number, but all of a larger size. The effect of the plaster was to make the crop at least one-fourth better.—*Farmers' Monthly Visitor.*

BLOODY, CLOTTED MILK—GARGET.

Mr. George Andrews, of East Bridgewater, inquires what he shall do with a cow that gives bloody milk at some times, and clotted milk at others.—She was but two years old last spring, she calved in July and now gives a gallon of milk per day, with good hay and two quarts of cob meal daily.—Her cream is not easily churned into butter; she will not eat salt, but appears to be hearty and well. The blood was first discovered in the bottom of the pail, but now it is seen in the stream from the teats.

☞The cow has the garget, and she should have some garget root with her food. Cut a hole in a potato, a turnip, or an apple, and insert a bit of garget root as large as your fore finger, and half as long; the cow will then eat it. If you give her the root in the summer she will eat it without an envelope.

If one bit of the root does not suffice give her another; it will not hurt her if she eats half a dozen. We sometimes insert a bit of the root into the dewlap when the cow is much affected, and it will cause a swelling there for a day or two as large as a quart bottle.

A little saltpetre in her meal will be good for her blood. Cows should often have access to garget root in the summer season. In winter they are seldom troubled with the complaint. The best cows are more often afflicted with it than the meanest.

The reason why the blood was first seen at the bottom of the pail is, there was but little, and blood being heavier than milk sinks below it. Sometimes cows will give bloody milk when they are not gargety; but clotted milk is a sure indication of this malady.

If the cow was farther from the sea she would want salt. It is not easy to tell why the cream from some cows is longer in coming to butter than from others—nor why cream at this season of the year is so unwilling to change. Perhaps it does not ferment sufficiently in cold weather. If you let it stand for a whole day near the fire it will come to butter much quicker on churning, than if you simply give it the proper heat. Does not this prove that it needs fermenting?—*Editor Mass. Ploughman.*

NEW PRESS.—There may be seen at the counting room of Messrs. James Anderson & Co. the model of a new press which can hardly fail to supersede all other kinds of presses for cotton, hay, and hemp. It consists of a screw working horizontically by means of a cog-wheel at the centre. There are packing boxes at each end of the screw, and while the presure is removed from the finished bale at one end, the presure is applied at the other. There is no loss of time. The hands that fill the packing boxes can be always employed at one box or the other. The gearing may be so arranged as to give any required speed to the screw up to a certain point, and then to diminish the velocity and increase the power to any requisite extent. The advantage of this will be obvious when it is considered that the resistance in pressing a bale of cotton is at first almost nothing, and increases greatly as the screw goes home. By this contrivance a pressure sufficient to fit the bale for foreign shipment may be obtained without sacrificing speed.

The inventor of this machine will shortly bring it before the public, and we can assure those interested that it is a vast improvement of the screw press.

[*Louisville Journal.*

Value of Hens in a Garden.—At a late meeting of the New York Farmer's Club, Mr. Smyth, the projector of the Atlantic Steam Navigation Company, said that he had in England trained two hens to destroy the insects in his garden, with great success.—He would let the hens into the garden early in the morning, and as they had finished their work, call them off to feed them, and then keep them away until the next morning, when they would be hungry. He was now engaged in training a regiment of hens to destroy the insects in a field of corn belonging to his nephew.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

☞The tables of inspections in the city of Baltimore, for the year 1844, which will be found on another page, are copied from the prices current of the "*American*" of last week.

Hussey's Reaper—Farmers intending to avail themselves of this valuable machine in the next harvest, had better send in their orders forthwith to prevent disappointment; it will be seen by Mr. H's. advertisement that an important improvement has been made in the machine, and the price arranged to suit the size. No extensive wheat grower should be without one of these Reapers, especially where labor is high and scarce. The increasing demand every year for Mr. Hussey's invention, is the best evidence of the estimation in which it is held by the agricultural community.

New York Agricultural Club.

The New York Farmer and Mechanic of the 2d instant, contains several columns of the discussions of this Club, from which we shall abstract such portions as appear to us of general interest.

Preparation of Salt Mud for Manure.

Mr. *Wakeman* inquired as to the best method of treating salt mud as a component of manure.

Mr. *Butler* stated that the salt in it should be killed with *lime*, potashes or ammonia. It could be accomplished in compost with barn-yard manure in about three weeks. Any material furnishing ammonia he stated would answer the purpose.

Experiments with Poudrette and Fish.

The chairman, Gen. *Chandler*, stated that Capt. Munson, of Sayville, Long Island, had manured a field of 12 acres for corn—one third with *Poudrette*, and fish on the other two-thirds—that the birds did not touch a single plant on that part of the field manured with Poudrette, while they pulled up and destroyed one fourth of his corn on that part manured with fish.

Management of Salt, Hay and Sedge for Manure.

Mr. *Wakeman* read a communication from a practical farmer, of N. Jersey, on this subject. He mowed all his salt meadows, hauled the grass to his barn-yard, wherein he kept 40 head of cattle, by which means he made more manure than he could use beneficially; he made it cheaper, and of a better quality than any he could get. His plan was to haul it from his barn-yard, fall and spring, pile it in as large heaps as possible, and on every two or three loads of his manure, to strew two or three hundred pounds of potash, and then the whole pile was *covered with sods*, when it was left until it was required to spread it—just before spreading it was turned over. Manure, thus made, costs 50 cents a load, in place, and the author of the communication states that he has no hesitancy in affirming that on his soil he has experienced more benefit from its use, than from any other kind of manure he had ever used, and he computes that every load of salt marsh grass treated upon his plan, will make two loads of manure.

The idea being advanced by one of the speakers, that the salt grass was productive of grub worms,

Gen. *Tallmadge* thought that such ideas should not be thrown out, without also showing clearly how easy and simple it is to have the benefit of the manure afforded by the grasses and sedge, and at the same time to destroy the grub. It seems that these products of marsh and swamp and morass, abound in the larvæ of insects; but there was not the slightest difficulty in treating the mass of sedge and grass with materials destructive of these larvæ. Add a due proportion of lime and they will be destroyed. Let our farmers cut their salt marshes, heap the grass up in piles and give it *lime*, and they will have excellent manure and *no* grub worms. They should also add a little of the lowest price salt. The *General* stated further—that the farmer who makes no use of the abundant grasses and sedge of his muck holes, morasses, cat-tail marshes, &c. ought to be pronounced no friend to himself or to his country.

General Tallmadge stated the following fact in support of his proposition, that *Lime* will kill the grub worm. A few years ago he spread 25 bushels of lime upon an acre of old grass land, which was full of grubs. He did this in the month of September, with an eye to a corn crop the next year. He planted his corn on that field and had not a single grub in it; while the corn of his neighbors was literally eaten up by them.

Mr. *Butler* said that, to secure the destruction of the grub, fermentation alone could not be relied upon—and gave this as the process by which lime in its action operated to destroy the grubs.—Lime, by inducing slow *combustion*, destroys them.

Mummy Wheat.

Mr. *Maxwell* presented to the Club a quart of Mummy Wheat, obtained by him recently in England. The grains from whence this grew were unrolled from a mummy in London three or four years ago. Mr. M. states that it is much valued in England and Scotland, and is very heavy and large.

Cause of the Slavers in Horses.

Mr. Joseph Black of New Jersey, stated that it is not true that the Slavers in horses is ever produced by clover. He had let his horses run on a meadow and found some of them diseased—he examined the field carefully—there was no clover in it; but he found arsesmart and Lobelia, which caused the disease.

We have made the above *abstract* with the view of bringing home to such of our readers as have them, the facility which their marshes affords, in mud and grass, for manufacturing manures. Marsh mud, whether salt or fresh, has a very large proportion of vegetable matter in it, which, from having remained long in water is not only highly acid, but in a state of inactivity, requiring something to promote the process of decomposition—and that something is *Lime*, which, as Mr. Butler observed, brings on *slow combustion*, or in other words, so warms up the inert vegetable matter, which forms the chief element of all marsh mud, as to prepare it for the food of plants—and while this operation is being performed, the super-abounding vegetable acid is neutralized, the soil sweetened, and the larvæ of all insects destroyed. If each load of marsh hay, treated in the way pointed out in the preceding discussion, will make two loads of manure, every owner of a cat-tail marsh, or marsh bearing any other variety of coarse grasses, should not hesitate in making arrangements against next summer, to cut such marsh with a view of converting the grass into the food of plants—and we think he may substitute *Lime* or marl for the *potash*, with a certainty of its acting advantageously.

Sulphuric Acid as a Manure.

It is stated in the French journals, that a *quart* of sulphuric acid—or oil of vitriol, as it is more commonly called,—diluted in 250 gallons of water and sprinkled over an acre of meadow, will have as beneficial an effect in promoting the growth of the grass as a dressing of 300 pounds of Plaster. It is further stated that it may be applied either in a dry or wet season, the state of the weather not effecting the operation.

South Carolina Agriculture.—*Valuable product of Cotton.*—Mr. Archibald Seabrook of Edisto Island, raised 5440 lbs of Sea Island Cotton in the seed, from 8 acres, and it is computed that this cotton when ginned will realize in money in Charleston, $95 to the acre. The cotton is represented of superior quality; but superior or otherwise, the product per acre is such as should satisfy the bump of acquisitiveness of any planter in the country. The land, as it appears from the statement, was manured with 160 piled *single* horse cart loads of marsh (grass.) It was put on in August 1843, immediately after being cut and partly listed in. Such a dressing with us would be considered a very small one, not half what would be applied.

Premium crop of Potatoes.—Mr. R. Cameron was awarded the premium for the best crop of Potatoes (sweet.) He raised 439 3-8 bushels on an acre of land.

Large crops of Corn.—No premium was awarded—there were two competitors—one produced 83 bushels 19½ quarts, the other 105 bushels and 18 quarts. The first produced his vouchers properly certified—the second had none—under the circumstances, the Society withheld the premium. Either of these crops should have secured the producer a handsome premium, for we look upon the individual who thus contributes to increase the capacity of the earth for productiveness, more entitled to honor than the General, who wins his wreathes at the cost of human blood, amid the groans of the wounded, and the pangs of kindred bosoms. The one is the trophy of peace, garnered in human hopes, and directed to the securement of human comfort, whilst the other is achieved by sacrifices which make the heart bleed, and the mind revolt at their bare recital.

The Cotton Planters—The views contained in the annexed article which we copy from the Richmond Compiler, are similar to those which we have, for years past, urged upon the attention of the Cotton Planters of the U. States—We are happy in knowing that many enterprising planters have not been indifferent to the importance of the subject, and have entered into other branches of industry beside that of cotton growing, with spirit and industry—and are now no doubt realizing the benefits of their foresight—but the practice is far from being general; and we fear that nothing short of imperative necessity will ever induce the great mass of planters to submit themselves to a change in their present system of employing their entire force in the production of Cotton, to the exclusion of nearly every thing else.

The Compiler says—The heavy stock of Cotton on hand has attracted the notice of the cotton growers of the South, who, from the articles we see in the Southern papers, are becoming convinced of the necessity of some course of proceeding on their part to prevent a further accumulation of a surplus. A letter from Mobile says—

"The crop is now, I think, generally estimated at 2,300,000 bales, and assuming that it is worth $20 per bale, the whole value is $46,000,000, *gross*, and I suppose the capital in hand, negroes, &c. employed is at least $500,000,000. From what is the nett income, I should say not over 3 or 4 per cent., while the rate of interest in all the cotton producing States is 6a8 per cent.

"If public opinion were now to settle on a crop not exceeding 2,000,000 bales, I believe the value of cotton would average $25 per bale, say $50,000,000, or $5,000,000 more than 2,300.000 will produce, besides the saving of bagging, &c. on 300,000 bales, equal to 1,000,000 more."

The writer proceeds to advise that the planters every where reduce the quantity of land in cultivation next year, and give more attention to the *quality*—that they may make every thing *at home* that they can make. The advantages of this course, he truly says, would be that, if the cotton trade of 1845 should be as good as it has been in '44, the surplus stock would disappear, to the benefit of the producer; and if the trade should not continue so

prosperous, the curtailment of crop would be still but the more necessary, and the producer would be the better able to meet the depression, as he would live more completely on the produce of his land.

This is good advice, but then good advice is not always followed by communities. Experience is the best teacher. Cotton is the "ruling passion" in the South; the crop of Cotton is the subject of thought and anxiety, the object of the heavy labors of the Southern planter. from the time of planting till the picking. So thoroughly is he bent on a large crop, that he forgets almost every thing else, and is completely absorbed in this. The necessaries of life are produced very sparingly, and the proceeds of the cotton relied upon to buy them as well as to accumulate wealth. There is little disposition to improve the appearance of things. Handsome gardens, neat enclosures, tasteful dwellings, &c. do not occupy much of the planter's thoughts, and much less his labors. We speak generally. There are some splendid and elegant family seats in the Cotton districts; but generally all who have visited them, will acknowledge that what we say is true.

It may be easily imagined how poorly they would be prepared to meet a heavy and injurious decline in their staple product; and those who are, as we see in many Southern papers, now engaged in endeavoring to direct the attention of the planter to the propriety of dividing his labors more judiciously—to producing more of the necessaries of life—to improving his grounds, and promoting the general beauty and comforts of his habitation —to husbanding his lands, &c. are doing a service which we hope may prove effectual.

It is now seen how suddenly the profits and prospects of the planter may be cut off; and this shows how important it is to him that the demand for his product should be made as permanent as possible. Nothing will contribute more to this end than a steady system for fostering home industry; for no demand can be so certainly permanent as a demand for our own manufactures. England is hostile to slavery, and has shewn a disposition to discriminate between the products of free and the products of slave labor, favoring the former: and all she can do in this way to the injury of the slave labor of the South, will be done. In relying, therefore, upon England, the only safeguard the South has, is in the necessity which compels her to buy our cotton—when that necessity becomes less imperative, the guarantee is of course less strong. And the South may see that the product of cotton in the English provinces is annually increasing, and that the surplus which now warns them to adopt changes in their system of culture is increased by the production in those countries which England is using her best exertions to encourage as competitors with the American producer.

☞*Smith's Corn Sheller*—The correspondent who requested information as to the price of this machine, is informed that it can be had of Messrs. R. Sinclair, jr. & Co. of this city, at the New York price, $50.

Application of Lime.

Georgetown, Jan. 3, 1845.

To the Editor of the American Farmer:

Sir: I have read at this place, with much instruction, the letters of Mr. Skinner and Dr. Darlington, in your last number, on the application of lime. I should feel obliged to either of those gentlemen, or any of your readers, to state, what effect would be produced by the application of lime on the surface of lime-stone lands? By successive cropping, the lime, I understand, is extracted from the *surface* soil. Is it, where the substratum is limestone? It projects above the surface in almost every field. Is *sufficient* lime kept in the surface soil, by the action of the weather, and the process of cultivation? Would the application of it, in a powdered state, to the surface of *such lands* be beneficial? In what quantity?

One other enquiry as to Mustard Seed. You gave us recently the experience in dollars and cents of an Ohio farmer in that article. When a boy, on the other side of the Atlantic, I remember, it was very much grown in my neighborhood, but being a boy, and not then supposing I should ever be interested in farming, I remember nothing more, than that it used to be said two crops would pay the purchase money of the land; but that it was a great pest to get out when once in. I think it used to be threshed and dressed in the open field upon large sail cloths. Will you, or some of your correspondents, state the whole process of culture? the kind, and quantity, to be sown—when—how, broadcast or otherwise—in what state to be cut—in what mode—and how dressed—the soil best suited, &c. Yours, Virginia.

[We call attention to the queries propounded by our correspondent, and hope that those who are capable of giving the desired information, will afford it through our columns.]

To the Editor of the American Farmer:

Sir:—I am too old a soldier to be frightened at the sound of blank cartridges—they make a noise and indicate fury, to be sure, but that is all—they end in smoke; so does the letter in your paper of the 11th inst., commenting upon a letter of mine in a previous number of your publication. I thought at first that I would call upon the author to throw aside his mask, but, on second thought, I considered that if the public did not, I could, see through the disguise he wears, and felt that my case was so strong I need not fear entering the lists and giving my opponent the advantage of fighting in armour that conceals his visage from the lookers on. Altho' he began his attack by disavowing that he wrote to defend his friend, that must have been his object, unless he chooses to be placed upon the other horn of the dilemma, that he was engaged by the owners of Peruvian Guano to fight on their behalf.

But I will give him the credit of being actuated by the more generous motive, and as the defence of his friend does honor to his heart; that he feels as he ought to feel for the literary reputation of his friend, and writes in the warmest language of anger. In no other cause would he have committed himself to incorrect reasoning and erroneous conclusions. But, he would not wait to consult his understanding, and sought by this appeal to the public to give proof of his friendship as well as of his courage.

Admiring the generous nature of his motive, I forgive the anger he displayed, and will not resent those words of reproach and that spirit of contumely, which, considering he *professes* to be an advocate of good manners, he applied somewhat too liberally. I know, however, that they should be set down to his indignation and that in writing them, his cooler moments and admiration of good manners had no share. To be sure he wrôte under a mask, and disguise is seldom resorted to by gentlemen, altho' hired writers occasionally adopt it.

If, however, this motive of friendship did not actuate him, what, I ask, brought him into the field? He is not an Agriculturist I believe, altho' he may be an amateur; and my communication was addressed to the Agricultural community. Does he think there is no one engaged in that honored pursuit who can watch over its welfare except himself? Or does he suppose there is no one connected with the sale of Peruvian Guano able to defend the interest of the owners? Let not his self-esteem thus mislead him.

I will not dispute his ability to wield the pen, but the weapon is so light that a child may use it, and sometimes with success. On this occasion my opponent wants *material* to defend his friends or to assail my position, and by substituting reproach, hopes to lessen the weight and correctness of my facts, and of my reasoning in the public estimation—but I tell him that he must resort to other weapons, or the public will see that my case is made out, and that he has none with which to rebut it. In my letter which roused the ire of this writer, I had combatted the reasoning and conclusions of "a friend to agriculture;" and this valiant knight errant rises up in his wrath and says—'you impute bad motives to my friend.' I ask, where such an imputation is to be found? My words were these, "I did not exactly see the object of the writer unless it were to induce farmers to purchase Guano from Mr. George, or to satisfy them that 3 c. per lb. was a reasonable price." Here I find no fault with the object. I added "that he reasoned badly and drew wrong conclusions from his premises." This opinion I still entertain; his reasoning was intended to forewarn farmers from purchasing African Guano, when they could purchase Peruvian from Mr. George; and thus he reasoned—African Guano is 70 per cent lower in price than Peruvian, and hence it must be inferior in that degree!!

I ask my readers to observe that the writers who complain of me, do not hesitate to do all they can to lessen the value of African Guano in the public mind, and if one steps forward to refute the opinion, these advocates for the sale of Peruvian Guano are instantly up in arms, and without disputing the truth of the facts, heap all kinds of abuse upon one who differs from them in opinion, and this too from those who call themselves "Friends to Farmers." If the prices of our produce were such that we could disregard the loss of a few dollars, it might be all very well; but is it so? on the contrary, have we not hard work to live? and is this difference of 70 per cent in the cost price of manure a matter of no moment to us?

It is right to remark that this valiant knight makes no attempt to meet my statement, that the owners of Peruvian Guano sell it in London and Liverpool at 2½c. per lb. —no, that rock he sails round, but charges me with *pretending* that I have seen the letters of instruction to the consignee. In the same sentence, he proves the accuracy of my statement and proves that he himself, at least, is in pretty close communication with him, for altho' he affirms I have not seen even one letter to the consignee, yet he admits that the owners did say to that gentleman, "The trade cannot be carried on unless you can realize for us £12 sterling per ton." Now what had I said, but this— "we (the owners) tell you, (the consignee) to fix upon such a price as shall enable you to remit to us £12 per ton." If my statement were mere conjecture, this courteous knight should have complimented me upon my discernment, for he himself shows my observation to be true.

But permit me to ask this well informed writer, how it happens that, if the Trade cannot be carried on unless £12 per ton be realized, these same parties sell it in London and Liverpool at £10 per ton?

Now for the mode by which the comparative estimate of the value of the two kinds of Guano is arrived at by my opponents. They say African Guano is nearly 70 per cent inferior to Peruvian—*such is the difference in their relative market value.* Are they so ignorant of the history of commerce and of human nature, as not to discern that another cause may produce this difference in their market value? Has this evidence of a monopoly ever failed to raise the price of an article in the hands of those in whose favour the exclusive right is created?

Is not Peruvian Guano in the hands of those in whose favor the odious privilede has been created?

On the other hand, has freedom in commercial enterprise ever failed to reduce the market value of an article of consumption?

Is not African Guano brought to the market by individual unshackled enterprise?

If my opponents do not know the truth of these principles, let them read Adam Smith, or some author of that school, and they will there find reasonable and probable cause for the difference in the price of the two kinds of guano, besides that which they publicly assign.

But I must contest with them the claim they set up for the great superiority of the Peruvian over the African. I acknowledge the authority of chemists in the matter, and what say they? Two analyses of African have been published, one is by a Scotch, and the other by an American Chemist. The first is in the possession of a gentleman in Baltimore, and the other was published in your paper of the 18th Sept., signed "Charles Raymond, M. D." This gentleman says the relative value of African to Peruvian, is as 37 to 43. If my memory does not deceive me, the analysis by the Scotch Chemist exhibited a smaller difference in favor of the Peruvian.

But let me put it seriously to my opponents. Can they suppose that English farmers are so senseless as to use the African, and that ship owners are so foolish as to employ 500 ships to carry it to England, if it be 70 per cent less valuable than Peruvian, already in possession of the market? I need give no answer to the question. Common sense will dictate it.

I am challenged to prove that farmers can purchase Peruvian Guano in Liverpool at £10 sterling per ton, by which I presume I am called on to show that farmers can purchase at the lowest quotations of the day in that port. I have no difficulty in accepting the challenge, and at once refer my commentator to the letter of his friend whom he is defending; he will there find the proof which he calls upon me to give. What one farmer *has* done, another *can* do.

My opponent insinuates that I am an insignificant person: had he said so in distinct terms, he would have spoken the truth. I am a very insignificant person: that is

my misfortune; but it may not, nevertheless, lessen either the weight of my facts or the correctness of my reasoning. I suspect from what I know of my opponent, that had I ranked with the wealthy and great of the land, he would have been more careful in his phraseology. He is also pleased to insinnate that my means are small, and that, therefore, I want Peruvian Guano to be sold at a price to bring it within my reach. He is right here also; I am one of very limited means; I would they were greater, and I dare to say that my assailant, from what I hear of him, would not object to an increase of his own.

Let this gentleman in future use his real signature, for in agricultural publications, before all others, should no disguise be worn. Truth should be every one's object, and truth is seldom arrived at in a masquerade. In a war of words, I am, doubtless, a pigmy compared with him, but if he will follow my practice as well as precept, I will continue the controversy so long, sir, as you permit us to occupy your columns.

I am, Sir, yours respectfully,
FRANCIS FINCH.

Plum Point, Dec. 16, 1844.

The French Tobacco Monopoly—A London letter of the 2d of Dec. says:

The French concours is appointed for the 28th Jan.—The quantity required of Kentucky Tobacco is much less than that which was taken last year; while that of Virginia is much larger, viz.

Of Kentucky, Type No. 1		500,000 *Kilos.*
	Do. 2 {1 2 3}	2,000,000 "
Of Virginia,	Do. 1,	400,000 "
	Do. 2, {1 2}	2,000,000 "
Of Maryland,	Do. 1,	400,000 "
	Do. 2, {1 2 3}	2,000,000 "

Inspections of Tobacco in 1844, *in the city of Baltimore.*

	hhds.
Amount of Tobacco remaining on hand in the four State Warehouses in the city of Baltimore, on the 1st January, 1844,	11,521
Amount inspected during the year,	48,932
	60,453
Amount exported and consumed during the year	47,777
Remaining on hand Jan. 1, 1845,	12,676

The kinds inspected during the year 1844, were as follow:

Maryland,	32,101 hhds.
Ohio	15,423 "
Kentucky	1,075 "
Virginia	225 "
Missouri,	40 "
Indiana,	30 "
Tennessee,	21 "
Pennsylvania,	17 "
Total,	48,932 hhds.

Inspections of Whiskey in the city of Baltimore, in 1844.

2,049 hhds. 33,237 bbls.

Beef Cattle and Hogs—Estimate of Beef Cattle and Hogs weighed at the Cattle Scales in the city of Baltimore during the year commencing on the 12th day of October, 1843, and ending on the 12th October, 1844:

Number of Beef Cattle, 18,553 head, weighing gross,	lbs. 17,974,799
Number of Hogs, 15,717 head, weighing gross,	3,051,895
	lbs. 21,026,694
Fees for weighing, 3½ cts. per 100lbs. yielding	$7,359 34
From which deduct salaries and expenses for repairs of scales,	1,577 10
Leaving a net revenue to the State of	$5,782 24

Inspections of Flour in 1844—The following is the amount of Flour inspected in the city of Baltimore during the year 1844, as made up from the returns of the inspectors:

	bbls.	hf. bbls.
Howard street,	261,314	5,621
City Mills	173,160	19,977
Susquehanna	27,789	
Family	24,212	454
	486,475	26,052

Besides the above there were inspected during the year 9,904 bbls. Rye Flour and 245 hhds. 25,054 bbls. and 1,525 hf. bbls. Corn Meal.

The following are the inspections of Flour for the last fourteen years:

	Barrels.	Half Bbls.	Total in bbls.
1830,	587,875	16,859	597,804
1831,	544,373	21,537	555,141
1832,	518,674	17,544	527,446
1833,	524,620	18,072	533,656
1834,	480,733	17,264	489,365
1835,	516,600	21,333	527,266
1836,	393,924	13,593	400,720
1837,	391,676	14,777	399,064
1838,	420,636	19,223	430,247
1839,	550,982	19,786	560,875
1840,	764,115	31,606	779,918
1841,	613,016	31,716	628,974
1842,	544,801	26,962	558,282
1843,	547,224	26,415	560,431
1844,	486,475	26,052	499,501

Inspections of Fish in 1844—The following is the amount of Salted Fish inspected in the city of Baltimore during the year 1844:

Herrings,	30,515 bbls.	337 hf. bbls.
Shad,	10,064 "	1005 "
Mackerel,	4,822 "	402 "
Salmon,	30 "	00 "

Inspections of Beef and Pork, in 1844.

	Tierces.	bbls.	hf. bbls.	qr. bbls.	kegs.
Beef,	2718	7958	1271	299	51
Pork	312	13151	373	148	
	3030	21,109	1644	447	51

Inspections of Butter and Lard in 1844.

	kegs.	bbls.	hf. bbls.
Butter	2471	13	60
Lard	25388	2941	68
	27,859	2954	128

These returns, compared with those of the preceding year, show an apparent falling off in the receipts of butter and lard of nearly 50 per cent; we would state, however, that such is not the fact, the difference in the amount of inspections being attributable to the circumstance that there are no compulsory inspections now, the matter being left entirely to the discretion of buyer and seller—we believe that the business done in these articles during the current year has been larger than previously.

From the New England Farmer.

THE POTATO CROP.

Mr. Editor.—The potato crop is one of our most valuable agricultural products, but for several years past, the *rust*, or as it is called in England, the "*curl*," has been making and extending its ravages in every direction; and for the past two seasons, the *rot* has prevailed in many sections of the country to an alarming degree. Whether the rust has any connection with the rot, I am unabled to say; but generally, I believe the potatoes have suffered much more by the rot where the tops were earliest killed by the rust. Possibly, the rust or premature death of the tops, may have predisposed and caused the tubers to rot and decay.

There have been many reasons assigned, and theories offered, to account for the rust or curl in the potato.

In the course of my reading for some years past, I have several times seen it stated, that the planting of thoroughly ripened seed was the cause of the rust, and that the using of unripe potatoes for planting, was a preventive of rust. Having always been of the opinion that good and well ripened seed, in all cases, should be used to ensure a good crop of grain, or any other crop we wish to cultivate, I had supposed the same rule would apply to the potato—but, you know, there are *exceptions* to general rules.

In the N. E. Farmer, of 5th of last June, you have copied from an English paper, (as I think) a sensible and philosophical article, "On the Curl in Potatoes," by a Mr. Deans. Those of your subscribers who keep files of the Farmer, can turn to it and read the whole article, and for the benefit of such as have not the paper on hand, I will make a few extracts.

Mr. Deans says: "The curl in the potatoes is the effect of an enfeebled vegetation, arising from over-ripening of the tubers used for seed. Whenever potatoes are to be used for seed, they require a mode of treatment very different from those designed to be used for food. The mode which I prefer to all others for seed potatoes, is this: as soon as the tubers have acquired their full size, and the vegetable tissue in the roots has become perfect, the skins beginning to set,—that is, when the cuticle can still be removed by the pressure of the finger and thumb, so that it peals off;—at this stage of their growth, they ought to be immediately taken up, and spread upon the surface of the ground, fully exposed to the influence of the atmosphere; by which means, in a short time the tubers will be tanned green. This early digging prevents the cellular tissue of the tubers from becoming gorged with solid matters, by cutting off the power of absorption from the roots; whilst, by the subsequent exposure of the tubers to the atmosphere, the juices combine with a larger proportion of oxygen, which, in the light, enters into combination with the coloring matter of these roots, not only changing their color from white to green, but also giving to them an increased vitality, as is seen in germination, when oxygen enters into combination with the juices, and carbonic acid is parted with; by which means the starch in the tubers, instead of becoming fixed, is retained in the transition state; so that when whose conditions calculated to excite vexation are present, the organizable matter in the tuber immediately excites the buds or eyes to vigorous growth. Similar results, to a certain extent, may be obtained by very late planting; so that when the process of vegetation is stopped by the autumnal frosts, the maturation of the secretions of the plant may be somewhat in the transition state; that is, they may not have acquired the solidity I have alluded to."

In the N. E. Farmer, of Sept. 25th, you have an article on "Selecting Seed Potatoes," which goes strongly to corroborate the views of Mr. Deans.

Several cases that have come under my observation, I think also, go far to establish the truth of the above theory.

Several years ago, a Mr. Johnson, a good farmer, in this town, whose farm is situated upon a very high hill, by having manured a piece of oat-stubble ground, and plowed the previous autumn, he was, in consequence of that and an early spring, enabled to plant his potatoes the last days of April. He raised a very large crop. A drought in August and September, almost cut off the late planted ones, of other farmers, and Mr. J. was enabled to self a large quantity at a good price, and having succeeded so well by his early planting, the next year he planted again as early as possible; the seed was of his well ripened crop of the previous year; but in August, the tops were all killed by the rust. It was the first time it had made its appearance on his farm, and he had a poor crop of potatoes, and of a poor quality. But it never occurred to him, or any one else, that planting his good ripe seed had anything to do with the premature death of potato tops.

Last year, a Mr. K., whose farm lies south of mine, planted, the very last of April, a good piece of pasture land that was broken up the previous autumn. It had a southern exposure, and had been well folded by the cattle in the pasture, and he had a very heavy crop of potatoes. The last spring, he planted with the seed he raised upon the pasture land, and his entire crop this year was the earliest and worst killed by rust, of any I have seen—and a third part was rotten when he dug them, and nearly another third rotted after they were put in the cellar.

A Mr. R., whose farm lies half a mile east of mine, and who from habit or necessity, is always behind his work, seldom plants his potatoes till from the 20th of June to the 10th of July. Never have his potato tops been killed till the frost comes. This year he had a field nearly as green when the frost came, as they were any time in the season, and not a rotten one on the acre—while upon the adjoining farms, the tops had been dead for weeks, except the Long Reds. Mr. R. admits that his potatoes are

not so good for the table as earlier planted and well ripened ones.

In September 1839, and again in Sept., 1841, I was upon Mr. Phinney's farm in Lexington. His large fields of potatoes were then green and flourishing, while the tops of nearly every piece of potatoes between this place and L., were dead. Mr P. informed me that he did not usually plant his main crop till about the 20th of June, or later; by his late planting he avoided the rust that generally attacked the earlier planted; the tops of the late planted kept green till killed by frost. Probably his crop were not over-ripened, by using seed of these unripe potatoes, he did not suffer from the rust. Any communication from Mr. P. to the public, through the press, upon the subject, would be interesting and useful.

The summer of 1816, was one of the coldest upon record: but very little corn ripened, and the crop of potatoes was light and of a poor quality. In the spring of 1817, they were so scarce here that they were sold from 50 cents to one dollar per bushel, and the scarcity was so great, that they were cut as fine for planting as the famous Rohans were when they were first introduced; but notwithstanding, there was of the greatest crops that season, ever raised here; and in the autumn, any quantity could have been purchased at ten or twelve cents per bushel. Quere—Had the unripe seed of 1816, any thing to do with the great crop of 1817?

The Chenango is an early potato. They have for several years rusted badly, and this year, rotted the most of any. The Long Reds, that you extolled so highly, in the N. E. Farmer, of Oct 28th, are a very late kind, and it is probable they seldom ever get perfectly ripe—and I do not recollect of ever seeing or hearing of their suffering by the rust.

Notwithstanding the weight of "circumstantial evidence" I have brought forward in support of the theory of using unripe seed, I think it will be necessary to make accurate experiments to test the truth of it. I have engaged of Mr. R. (referred in this,) some of his late planted and unripe seed, to test next season "row by row" with fully ripened seed of the same varieties, and if nothing prevents, will give the result, and I hope many others will do the same.

L. BARTLETT.

Warner, N. H., Dec. 10, 1844.

☞We find the following in the Albany Cultivator. Cotton Beds are becoming very much in use on steamboats on the Western rivers, and they are considered superior to any kind but hair:

COTTON BEDS.—We have received from J. A. Guernsey, Esq., a copy of the "Southron," published at Jackson, Mississippi, containing some remarks on the advantages of cotton for bedding. These advantages may be summed up as follows. It is claimed that "it is the cheapest, most comfortable, and most healthy material for bedding, that is known in the civilized world." In addition to these, may be named *superior cleanliness;* vermin will not abide it: there is *no grease* in it, as in hair or wool; it does not get *stale* and acquire an *unplesent odor*, as feathers do; moths do not infest it, as they do wool; it does not pack and become hard, as moss does; nor does it become dry, brittle, and dusty, as do straw or husks; and in many cases *medicinal.*" It is said not to cause that lassitude and inertia, which is produced by sleeping on feathers. People not acquainted with it, have supposed they have been sleeping on the best feathers, when in fact their beds were made of cotton. The relative cost of cotton compared with feathers, hair, &c., may be seen from the following statement.

Cost of a Hair Mattrass.—They are generally sold by the pound and cost from 50 to 75 cents per pound. Thirty or forty pounds will cost $15 or $20.

Wool.—Thirty pounds of wool at 30 cents per pound, $9; twelve yards of ticking at 12½cents per yard, $4 50; labor, thread, &c., $2 75. Total, $13 25.

Feathers.—Forty pounds feathers at 30 cents per pound, $12 00; fifteen yards of ticking at 12½ cents per yard, $1 87½; labor &c., 75 c. Total, $16 62½.

Cotton.—Thirty pounds cotton at 8 cents per pound, $3 40; twelve yards ticking at 12½ cents per yard, $1 50; labor, thread &c., $2 75. Total, $7 65.

It is recommended to run the cotton through a "picker," where one can conveniently be obtained before using. This gives it additional cleanliness and buoyancy.

The substitution of cotton for bedding throughout the United States would be an immense saving, besides opening a new avenue for that article to an extent according to the estimation of this writer, equal "to more than two of the largest crops of cotton ever produced in the United States."

Large Beets.—We acknowledge the receipt of two Beets the raising of W. Roberts, of Tyree's Springs, one weighing 18 lbs. the other 14⅜; should any one wish to see them, they can do so by calling at our Office, and we are somewhat of the opinion, they would be hard to beat, even in old Williamson.—*Tenn. Ag.*

Stripping leaves from Corn.—Some farmers are in the practice of stripping the leaves from corn for fodder, during this and the following mouth. This has always an injurious effect, as no part of a plant is more necessary for the maturity of its seed, than the leaves—for they are to plants the same as lungs to the human system—The truth of this may be easily proved by stripping alternate rows of corn in a field, and afterwards measuring the proceeds.—*Central N. Y. Far.*

R. SINCLAIR, jr. & Co's CATALOGUE
FOR 1845.

☞Orders for any article in the annexed catalogue will meet with prompt attention, addressed to S. SANDS, publisher of the American Farmer, or to R. Sinclair, jr. & Co. Light st. wharf.

Fruit and Ornamental Trees, Shrubs and Plants,

Cultivated at the *Clairmount Nurseries and Seed Garden*, near Baltimore, by SINCLAIR & CORSE, Proprietors, viz:—

Apple,	25	cents each, or $18 per 100
Peach,	19	" $15 "
Pear,	37	" 50 cents each
Plum,	50	cents, except rare sorts
Cherry,	37	" do do
Apricot,	37	cents
Nectarine,	37	" each
Almond,	57	" "
Mulberry, Italian, Morus Alba		
" Chinese Morus Multicaulis,		
" Alpine,		
" Canton,		
" Rose of Lombardy,		
" Brussia,		
" Asiatic,		
Quince,	37	cents each
Currant,	1	to $2 per dozen
Gooseberry,	25	to 31 cents each
Figs,	50	to 75 "
Raspberry,	6	to 25 "
Walnut,	25	to 50 "
Chesnuts,	25	to 50 "
Filbert and Hazlenut,	25	to 37 "
Strawberry Plants,	$1	per 100; new and rare sorts 50 *a* 75 cents per dozen
Whortleberry,	25	to 50 cents each
Cranberry,	25	cents each
Grape Plants,	37	to 50 cents each
Grape Cuttings,	50	cents per dozen
Ornamental forest trees, first and second classes,	25	cents to $1 50 each.
Hardy Ornamental Shrubs,	25	to 50 cents each
Ornamental Evergreens,	25	to 75 "
Vines and Creepers,	25	to 50 "
Honeysuckles,	25	to 50 "
Dahlias,	25	to 75 "
Roses,	25	cents to $3 each
Chrysanthemums,	25	to 50 cents
Hawthorns, for Hedges,	3 50	to $5 per 1000
Asparagus Roots,	5	to $6 per 1000
Artichoke,		Do
Horse Radish,	$1	per dozen
Hop Roots,	$1	"
Sea Kale,		Do
Rhubarb for tarts,	$2 50	per dozen
Dyer's Madder,		Do

Catalogues of the above trees, plants, &c. can be obtained gratis, at this establishment, containing the different varieties in detail, with remarks by Robert Sinclair, Sen. giving his practical experience relative to planting, and general management of orchards, etc.

BALTIMORE MARKET, Jan. 6.

Beef, Balt. mess,	8a	Butter, Glades, No. 1,	13
Do. do. No. 1,	7a	Do. do. 2,	7a11
Do. prime,	5a	Do. do. 3,	5a7
Pork, mess	9	Do. Western 2,	6a
Do. No. 1	8¼	Do. do. 3,	5a6
Do. prime	8	Lard, Balt. kegs, 1,	6¼a7
Do. cargo,	a	Do. do. 2,	none
Bacon, hams, Ba. lb	6a7½	Do Western, 1,	a6¾
Do. middlings, "	4¼a5	Do. do. 2,	5a5½
Do. shoulders, "	4¼a5	Do. do. bls 1,	6a6¼
Do. asst'd, West.	4¼	Cheese, casks,	6
Do hams,	5a7	Do. boxes,	5a8½
Do. middlings,	a5	Do. extra,	12a15
Do. shoulders,	3¾a4		
COTTON—			
Virginia,	9a10	Tennessee, lb.	
Upland,	6⅞	Alabama,	11a12
Louisiana,	11⅞	Florida,	10a12
North Carolina,	10a11	Mississippi	
LUMBER—			
Georgia Flooring	12a15	Joists & Sc'ling, W.P.	7a10
S. Carolina do	10a12	Joists & Sc'ling, Y.P.	7a10
White Pine, pann'l	25a27	Shingles, W. P.	2a9
Common,	20a22	Shingles, ced'r,	3.00a9.00
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75
Common do	8a10	Laths, split,	50a 1.00
MOLASSES—			
Havana, 1st qu. gl	30a31	New Orleans	31a
Porto Rico,	29¾a	Guadaloupe & Mart	26a28
English Island,		Sugar House,	28a36
SOAPS—			
Baltimore white,	12a14	North'rn, br'n & yel.	3¼a4¼
brown & yell'w	4½a5½		
TOBACCO—			
Common	2 a 3½	Yellow,	8 a10
Brown and red,	4 a 5	Fine yellow,	12a14
Ground leaf,	6 a 7	Virginia,	4 a 9
Fine red	6½a 8	Rappahannock,	
wrappery, suitable		Kentucky,	3 a
for segars,	8a13	St. Domingo,	13 a11
Yellow and red,	7a10	Cuba,	15 a38
PLASTER PARIS—			
Cargo, pr ton cash	2.75a	Ground per bbl.	1.12a
SUGARS—			
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00
Do. brown	a7.50	Brazil, white,	a
Porto Rico,	5.50a6.40	Do. brown,	
New Orleans,	5.55a	Lump, lb. c.	
FLOUR—We quote			
Superfine How. st., from stores, bl			$4.06.
Do. City Mills,			4.18.
Do. Susquehanna,			
Rye, first			3.37a
Corn Meal, kiln dried, per bbl.			2.25
Do. per hhd.			11.75
GRAIN—			
Wheat, white, p bu	90a100	Peas, black eye,	50a55
" best Va red	88a	Clover seed, store	$4.37a
" ord. to pri. Md	75a88	Timothy do	2.a2.25
Corn, white,	39a	Flaxseed, rough st.	1.35
" yellow Md.	41a42	Chop'd Rye, 100 lbs.	1.25
Rye, Md.	67a	Ship Stuff, bus.	20a
Oats, Md.	25a27	Brown Stuff,	15a
Beans,	110	Shorts, bushel,	10a
FEATHERS—per lb.			31a
COFFEE—			
Havana,	7 a 8	Java, lb.	10 a12
P. Rico & Laguay.	5½a6½	Rio,	6¾a7½
St. Domingo,	5¾a 6	Triage,	3¼a 4¼
CANDLES—			
Mould, common,	a10	Sperm,	30a31
Do. choice brands,	10½	Wax,	60a65
Dipped,	a 9		

Tobacco.—The demand at present is confined to the better qualities of Maryland and Ohio Tobacco of which the receipts are very light, and the transactions are consequently extremely limited. We quote the rates at which Maryland Tobacco is held, viz: Inferior and common $2a$3; middling to good $3,50-a$5; good $6-a7,70; and fine $8a14. Small sales of Gro'd Leaf at $3a7, for inferior to good parcels. Very inferior has been sold at $2,50a2,75. We continue our rates for Ohio, viz: common to middling $3a4,50; good $5a$6; fine red and wrappery $6. 50 a $10; fine yellow $7 50a 10, and extra wrappery 11a 13. The inspections of the week are 154 hhds Maland, 45 do Ohio, 10 doKy. and 7 do Va. Total 216 hds.

Cattle—470 head beef cattle offered at the scales on Monday, 370 of which were sold, 100 driven north, and the balance laid over. Prices ranged rt 1.50 to 2.75pr 100lbs on the hoof as in quality.

Hogs—Only a moderate supply of live—sales limited at $4.25 pr hundred lbs.

HARVEST TOOLS.

In store and for sale by J S. EASTMAN, Pratt street, near Charles, Wolf's very superior Grain Cradles, (such as I have been selling for the last five years;) Grain and Grass Scythes; steel and wood Hay Forks; an assortment of Hay Rakes, Horse Powers and Threshing Machines, of different patterns, for 2 and 4 horses; Wheat Fans, plain and expanding Corn and Tobacco Cultivators, Corn Planters, my superior Straw Cutters, of all sizes, with wood and iron frames. Also a large assortment of PLOUGHS, of al sizes, and other farming implements. May 2

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris, for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street. P. S. CHAPPELL, or,
an. 3. WM. L. HOPKINS, Agent.

WHITE TURKIES.

I have for sale, two or three pairs of the pure White Turkies, which will be sold low if immediately applied for.
Also, several kinds of Fancy Fowls.
SAMUEL SANDS,
dell at the office of the American Farmer

GRAIN CRADLES! GRAIN CRADLES!

We mean what we say when we assert that A. G. MOTT, corner of Ensor and Forest sts. Old Town, near the Bel-air market, is now making up, and has for sale, the very best and cheapest article of the kind in the Baltimore market, and no mistake. Try them je 19

PRICE 100 DOLLARS.

Reaping machines simplified, and their durability very greatly increased, will cut as fast as any 1 made prior to 1841; two horses are geared abreast, and are relieved from the once objectionable weight, and the draught is very much diminished. The value of this late improvement has been tested by Wm. Butler and Jacob Staley, of Shepherdstown, Va. who if applied to will give it the highest character.

The large Reapers are made as usual at $170—medium size will be made to order.

My Corn and Cob Crusher, so well known in the South, stands unrivalled—price $25 to $35. OBED HUSSEY.

Baltimore, Jan. 7, 1845. ja 9

PERUVIAN GUANO.

The balance of the cargo of Peruvian Guano received by the undersigned per ship "Orpheus" from the Chincha Islands, for account of the Peruvian Guano company, is offered at the following prices.

Under one ton	3 cts. per lb.
From 1 to 5 tons,	$60 per 2240 lbs.
" 5 to 10 "	$55 "
Over 10 tons,	$50 "

This cargo is warranted to be pure and of the best quality.

For sale in bags (of about 130 lbs. each) in small quantities by David C. Harris, opposite the museum, Baltimore street, or in parcels of one ton and upwards by

SAML. K. GEORGE,
No. 2 German st., Baltimore,
ja 1 tf Agent for the Peruvian Guano company.

DISSOLUTION.

The undersigned have sold out their entire interest in the "Bommer Manure Method" to Mr. George Bommer, of New York; in consequence of which the partnership heretofore existing between us was dissolved on the 6th ultimo by mutual consent.

Our agents are requested to make up their accounts to the 6th of November, and forward them to Tho. M. Abbett, Baltimore, who is solely authorised to settle.

For any trahsactions after that date they will account to Mr. Bommer.

TH. M. ABBETT,
CHARLES BAER,
JOHN GOULIART.

Baltimore, Dec. 14, 1844.

N. B. Charles Baer is the General Agent for Mr. Bommer in Georgia, and John Goaliart his General Agent for the State of Maryland, residence 132 Madison near Eutaw st. de 18

THE BOMMER MANURE METHOD.

We wish to afford every facility to the introduction of this method, as the better it is known the higher it will be esteemed. If farmers who are living in a neighborhood will club together, we will offer them the following inducements to purchase, viz. To any club of Five ordering the method to one address, we will make a deduction of 15 per cent. To a Club of Ten, 20 per cent. reduction, and to larger clubs, a still larger discount upon our established rates for single methods, which are as follows:

For a garden up to 20 acres,	$6
" 100 acres arable land,	10
" 200 " "	15
" 300 " "	18
" 400 " "	20
Unlimited number of acres,	25

☞Purchasers of a smaller right can at any time increase it by paying the difference in price.

☞Those who find it more convenient, can leave their orders with S. Sands, at the office of the *American Farmer*, who will promptly attend thereto. mh 13

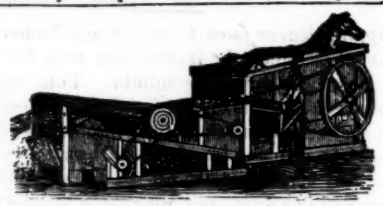
AGRICULTURAL IMPLEMENTS.

J. S. EASTMAN, at No. 36 West Pratt st. about half a square west of the Baltimore and Ohio rail road depot, has on hand a great variety of Plows and Plow Castings, and other Farming Implements at wholesale and retail, as follows, viz. his newly patented Cleasy self-sharpening plows of 7 different sizes, (and one large left hand do) he has many testimonies to show the superior merits of this implement.

Also—Gideon Davis' improved ploughs, of all sizes, wrought and cast shares, do do. Connecticut improved, a superior article for light soil; Evans' reverse point ploughs, with cast shares only; Wyman's No. O. self-sharpeners, various bar-share and coulter ploughs and superior side ploughs, etc. etc. Also, corn and tobacco Cultivators, wheat fans, cylindrical straw cutters of various sizes, a superior article; lime carts, superior Pennsylvania made grain Crardles; small Burrstone Mills for driving by horse-power or steam; Corn Shellers, Threshing Machines (and horse-powers for two or four horses) made very durable and to thresh clean. Bachelder's and Osgood's patent corn planters, etc. with a great variety of other implements made of the best materials and in the best manner. All the above are sold at reduced prices to suit the times. may 1

FARM FOR SALE.

The advertiser will sell the Farm on which he now resides, situated in Baltimore county, about 30 miles north of the city, and about 4 miles from the Susquehanna rail road, containing 100 acres of land, about two-thirds of the same is under good cultivation, the balance is well timbered; the fields lay well to the sun, and are well watered; there are a number of excellent springs and a sufficiency of water for a mill; there is a quantity of good meadow, and much more can be made; also a variety of choice fruit; a stone Dwelling House, 26 by 36 feet, 3 stories high, a log barn with stables and a threshing floor; and other conveniences. The whole of this property can be procured at a low rate for cash, or for notes on interest with good security or by way of exchange for property in the city. Enquire at this office. ja 1



WHITMAN'S THRASHING MACHINE & HORSE POWER DEPOT, No. 2 Eutaw st., opposite the Eutaw House, where the subscriber now offers for sale all his new improvements in the Thrashing-machine and Horse-power line, consisting in part of his new SEPARATOR, patented March 20th, 1844, which thrashes and cleans the grain at one operation, and is considered the greatest labor saving machine, and of the most value to the farmer of any machine ever invented in this country.

NEW STRAW CARRIERS—These machines thrash and separate the grain from the straw in a rapid and perfect manner, and are highly approved by all.

Improved CYLINDER THRASHERS—Warranted to thrash faster than any other kind of thrashers that can be produced.

Improved HORSE POWERS, on the rail-way principle, for one or two horses. These machines are durable, possess double the power of the common kind, and occupy about one eighth of the room. All of the above are made of the best materials, by experienced workmen, and warranted. I will furnish a man to go out with them and set them up in any part of this State, if desired.

As this is no humbug, all who feel an interest in agriculture are respectfully invited to call and examine for themselves.

All orders addressed to the subscriber, Baltimore city, will meet with prompt attention. EZRA WHITMAN. Jr.
jy 17

TEN DOLLARS REWARD.

The above reward will be paid for the delivery, to Dr. Woodside, at the Baltimore and Ohio rail road depot, of a fine DURHAM HEIFER, between two and three years old, of fine size and in good condition. This heifer was brought from Philadelphia on the steamboat, and escaped, it is supposed, from the boat after her arrival in Baltimore, on Saturday, the 19th of October last. Her color is principally white, but with spots of roan interspersed over the body, and a strawberry roan head and neck. She is very gentle, and had on, when lost, a leather halter, fastened together with iron rivets; and likewise a piece of new grass rope tied round the neck.
no 20 t CHARLES B. CALVERT.

FARMERS! EXAMINE FOR YOURSELVES!

The well selected stock of Implements belonging to JAMES HUEY & CO. No. 7 BOWLY'S WHARF, Baltimore. Our stock consists of a large lot of PLOUGHS, SHEARS, POINTS, and CULTIVATORS, which we will sell low to suit the times—among which rank the economical WILEY, and the MINOR & HORTON PLOUGH of the N. York composition metal and manufacture—the share has a double point and edge, equal to two shares and points. We keep on hand all kinds of PLOUGHS, premium CORN SHELLERS, HAY & STRAW CUTTERS, Corn & Cob CRUSHERS, Horse RAKES, Corn and Tobacco HOES. ☞Farmers and Planters on the Eastern and Western Shores may send their orders with confidence, as they will be attended to with promptitude. We also keep GARDEN & FIELD SEEDS. Thankful for past favors, we hope to merit a continuance of the same. Agents for the above implements,

S. L. STEER, Market st. near the corner of Paca, Baltimore
E. & W. BISHOP, Bel-air market, Baltimore. fe 28

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned *successors to the late firm of Bentley, Randall & Co.* are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for *rendering lard*, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and *soap making*, and for many other purposes for all of which they are now in *successful* operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of *two thirds*, and in many instances *fully three fourths*—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, Mc Causland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf RANDALL & CO.

JAMES MURRAY'S
PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for $15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

☞Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber,

Mr. Abner Linthcum, jr., and all Machinests are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratice.

Patent Rights for sale by the subsbriber.
o 8 JAS. MURRAY, Millwright, Baltimore.

MANGELWURZEL AND FRENCH SUGAR BEET SEED,

Just received and for sale by
ROBT. SINCLAIR JR. & CO.
Ap 22 Seedsmen, No. 60 Light st.

CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheayness and good work with light draft. He will furnish patterns to manufactureas living out of this state on reasonable terms. may 1

MURRAY'S CORN & COB CRUSHERS & GRINDERS

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for $25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also, Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell.
fe 14 WM. MURRAY.

MARTINEAU'S IRON HORSE-POWER IMPROVED

Made less liable to get out of order, and cheap to re-repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shorest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH,
corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20 Pratt street. Baltimore, mar 31, 1841

NEALE & LUCKETT, *No. 3, Light street wharf,*

Have received from a gentleman in Maryland, a supply of FLY PROOF WHEAT for Seed, which they offer for sale at $1½ per bushel. This is a very superior wheat, weighing from 60 to 65 pounds to the bushel, yielding largely upon lands of tolerably quality, safe from the ravages of the fly, and making a rich and very nice flour. It is of German origin, and a different species from the *Mediterranean wheat*, which it is believed does not yield good flour. Persons wishing to supply themselves with seed, are desired to call and examine the sample now on hand. A few hundred bushels more can be obtained from the same source, if early application be made. Aug 28